

CONTADOR DIGITAL DE COLONIAS
DIGITAL COLONY COUNTER
COMPTEUR NUMÉRIQUE DE COLONIES

Ref. BRJ003

nahita
blue



Este manual es parte integrante del aparato y debe estar a disposición de todos los usuarios. Le recomendamos que lea atentamente este manual y siga todos los procedimientos de funcionamiento, para obtener el mejor rendimiento y una mayor vida útil del aparato.

This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.

Ce manuel fait partie intégrante de l'appareil, c'est pourquoi il doit être disponible pour tous les utilisateurs. Nous vous recommandons de lire attentivement ce manuel et de suivre toutes les procédures d'utilisation, afin d'obtenir les meilleures prestations et une plus grande durée de vie de l'appareil.

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1. IMPORTANT NOTICE

This equipment has been designed exclusively for laboratory use. Before installing and operating it, please read this manual carefully and keep this documentation for future reference.

The equipment must not be modified under any circumstances. Any unauthorised modification will void the warranty and may pose a risk to user safety or cause malfunction.

Safety and usage recommendations:

- Check the voltage indicated on the rating plate and ensure that it matches the power supply at your installation.
- Install the equipment in a clean, dry, dust-free and well-ventilated environment at an ambient temperature below 40 °C.
- To avoid the risk of overheating, electric shock or malfunction, only use the 12 V DC power adapter and USB connection cable supplied by the manufacturer.
- Avoid scratching or damaging the surface of the Petri dish, as this could affect the correct illumination of the backlight and, therefore, the accuracy of the count.
- Dispose of packaging material in accordance with local waste management regulations.

Operating conditions:

- Ambient temperature: 5-40 °C
- Relative humidity: ≤ 80% RH (non-condensing)
- Power supply: 100-240 VAC, 50/60 Hz, 18 W
- Maximum operating altitude: up to 2000 m
- Pollution degree: II
- Use: indoors only

2. TECHNICAL SPECIFICATIONS

| | |
|-----------------------------|----------------------------------|
| Code | BRJ003 |
| Screen | LED |
| Magnification | 2x |
| Operating functions | Average, zero (reset), countdown |
| Illumination | LED (adjustable) |
| Pressure sensitivity | Adjustable |
| Acoustic signal | Adjustable |
| Output | USB |
| Weight | 5.6 kg |
| Dimensions | 35x30x37 cm |

Optional software:

| | |
|--------------------|-------------------------------------|
| Code | BRJ004 |
| Description | Software for digital colony counter |

3. UNPACKING

Check that the packaging is complete and free from visible damage before unpacking. Once the package has been opened, check that all the components and accessories listed in the supply list are included.

If you detect any anomalies, damage or missing components, do not use the equipment. Keep the original packaging and contact your supplier.

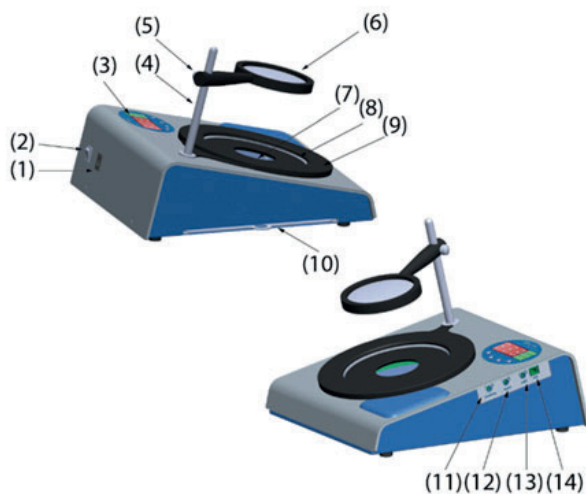
Contents of the BRJ003 package:

- Colony counter
- Magnifying glass
- Magnifying glass stand
- Screwdriver
- Power adapter
- Instruction manual

Contents of optional software BRJ004:

- PC software
- USB connection cable
- Instruction manual

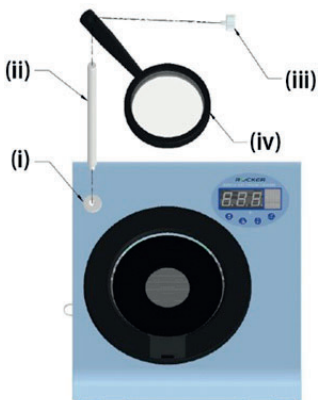
4. GENERAL APPEARANCE



| Description | | Description | |
|-------------|----------------------------|-------------|---|
| 1 | DC power socket | 8 | Petri dish adapter (60 mm) |
| 2 | Power switch | 9 | Adjustable Petri dish adapter (90–150 mm) |
| 3 | Control panel | 10 | Bottom plate (white/black) |
| 4 | Magnifying glass holder | 11 | Pressure sensitivity regulator |
| 5 | Adjustable screw | 12 | Counting acoustic signal regulator |
| 6 | Magnifying glass | 13 | Light intensity regulator |
| 7 | Position of the Petri dish | 14 | USB connection port |

5. INSTALLATION AND OPERATION

5.1. Installation



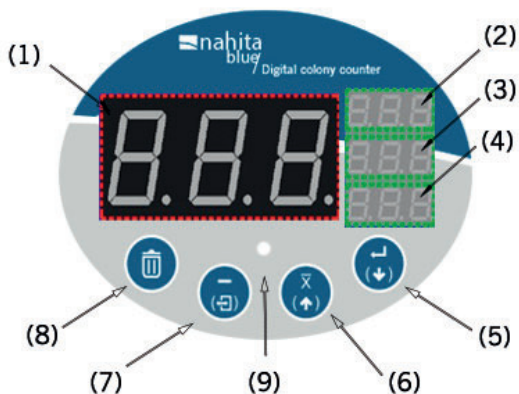
Screw the magnifying glass holder (II) into the magnifying glass position (I).
Slide the magnifier (IV) through the holder (II) and lock the adjustable screw (III) at the appropriate height.

5.2. Start-up

- Connect the power adapter to the main unit and verify that the input voltage is within the range specified for the adapter.
- Secure the main unit as shown in the diagram above and adjust its height for optimal viewing of the Petri dish.
- To transfer the count data to your computer, connect the colony counter to a PC using the supplied USB cable and launch the corresponding software.
- Use the supplied screwdriver to adjust the pressure sensitivity, acoustic warning level and lighting intensity as required.
- Replace the bottom plate (white or black) if necessary, depending on the type of sample and the contrast required.
- Keep the Petri dish placement area and magnifying glass clean to ensure proper light transmission and accurate counting.

5.3. Operation - Buttons, indicators and controls

BUTTONS



| | N° | Function | Description |
|----------------|----|----------|---|
| Operating mode | 5 | SAVE | Saves the count value in the main unit |
| | 6 | AVERAGE | Calculate the average of the saved counts. The average data is displayed on the screen (1) |
| | 7 | BACK | Subtract 1 unit from the count value on the display (1). Alarm with a beep |
| | 8 | CLEAR | Clear the count value or previously stored data. Alarm with a long beep |
| Display mode | 5 | NEXT | View the next record |
| | 6 | PREVIOUS | View previous record |
| | 7 | EXIT | Press and hold for 1 second to enter display mode when '000' appears on the screen (1). Press again to exit display mode. |
| | 8 | DELETE | Clear the saved record. Alarm with long beep |

Operating mode:

- Place the Petri dish in position. If the dish is 60 mm, use the adapter ring. Select the dish base; white or black, depending on the desired contrast.
- Mark each colony with a marker pen; each click will be shown on the screen (1) and emit a sound. Ensure that the screen (1) is at 0 before starting; if there is previous data, press (8).
- To correct excessive counts, press (7).




- Press (5) to save the count. The saved count will be displayed in (2), (3) and (4) as you save data.
- Press (6) to calculate the average.

Note: Only the three most recent counts are displayed; the others are stored internally. The unit can store up to 100 counts. If the limit is reached, data will need to be deleted.

Display mode:

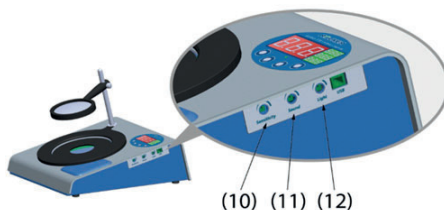
- Access display mode by pressing and holding (7) when the screen (1) shows '000'.
- While holding down, the display (1) shows the total number of data points stored.
- When you release (7), the stored data is displayed on screens (2), (3) and (4). Use (5) and (6) to scroll through the data. A beep will sound when you reach the first and last records.
- The selected count flashes.
- Press (8) to delete the flashing count; a long beep will sound. Deleted data cannot be recovered.
- To exit display mode, press (7).

INDICATORS

| | Colour | | Description |
|---|---|-------|---|
| 9 |  | Green | Illuminated: connection and data transmission correct. Flashing: data is being transmitted |
| |  | Red | Lit: connection error and data transmission failure |
| |  | Off | No light: computer connection not detected |

REGULATORS

Adjust the following items using the screwdriver provided. Turning clockwise will increase the setting; turning anticlockwise will decrease the setting.



| N° | Function | Description |
|----|------------------------------------|---|
| 10 | Pressure sensitivity regulator | Adjusts counting sensitivity |
| 11 | Counting acoustic signal regulator | Adjusts the sound volume |
| 12 | Brightness control | Adjusts the intensity of the backlighting |

6. MAINTENANCE

- The equipment is not autoclavable. Clean the Petri dish holder, magnifying glass and surface of the main unit with 75% ethanol after each use to sterilise and ensure good illumination.
- Store the instrument in a well-packaged box to prevent dust accumulation and affect light transmission if not used for a period.

7. TROUBLESHOOTING

| Problem | Cause and solution |
|--------------------------|--|
| Main unit does not start | <ul style="list-style-type: none"> - Incorrect voltage → Reconnect it to the specified power supply - Switch is off → Switch on the main unit - Defective or loose components → Contact your supplier |
| Poor backlighting (LED) | <ul style="list-style-type: none"> - Incorrect light setting → Adjust the light intensity with the screwdriver - Defective main board or backlight board → Contact your supplier |
| No sound | <ul style="list-style-type: none"> - Incorrect acoustic settings → Adjust the volume with the screwdriver - Defective main board → Contact your supplier |
| Poor sensitivity | <ul style="list-style-type: none"> - Incorrect sensitivity setting → Adjust the sensitivity with a screwdriver - Defective main board → Contact your supplier |